

To: Way, Steven[way.steven@epa.gov]; Byron Hartman
(b.hartman@erllc.com)[b.hartman@erllc.com]; Griswold, Hays[Griswold.Hays@epa.gov]
From: Christoph Goss
Sent: Wed 11/18/2015 11:48:30 PM
Subject: Valves for Flow Control Structure
23770 Rev B Submittal Package.pdf

FYI

From: Ray Eldridge
Sent: Wednesday, November 18, 2015 4:34 PM
To: dan@roadrunnerfabrication.com
Cc: Bryant Charlo <bryant.charlo@deereault.com>; Christoph Goss
<christoph.goss@deereault.com>; Kelby Sommer <kelby.sommer@deereault.com>
Subject: FW: DeZurik Quote Request

Dan –

Attached and below are the cut sheets and quote for the 12" dia. knife gate that you will need to purchase for the Gold King flow control structure. The 8" dia valve that you need will be salvaged from the adjacent mine. Note that all your valve gaskets should be 1/8" NBR.

Sorry for the earlier confusion.

Best regards,

Ray

Ray Eldridge, P.E.

Deere & Ault Consultants, Inc.

420 W. Main St., Suite 202

Boise, Idaho 83702

Office: (208) 331-9736

Cell: (208) 830-1395

ray.eldridge@deereault.com

From: Kelby Sommer
Sent: Wednesday, November 18, 2015 4:31 PM
To: Ray Eldridge
Cc: Bryant Charlo
Subject: FW: DeZurik Quote Request

From: Shellie Pacheco Jones [<mailto:shellie@ptsusa.co>]
Sent: Friday, October 09, 2015 3:31 PM
To: Kelby Sommer
Cc: Dax Julian
Subject: RE: DeZurik Quote Request

Hi Kelby,

Sorry for the delay! I was out of the office earlier this week. Please see below update quote for size 12". I will confirm lead time with the factory and have an answer for you Tuesday morning (as factory is closed Monday for Canadian holiday). An updated submittal package for the 12" assembly is attached.

KGC,12,ES,F1,S2,SMP,S2-M*MN-HD16-S1

- **KGC:** Style - Cast Knife Gate Valve
- **12:** Size - 12 Inch
- **ES:** Body Style - Extended Service Valve
- **F1:** End Connection - Flanged Drilling; ASME 125/150
- **S2:** Body Material - 316 Stainless Steel Cast
- **SMP:** Packing - PTFE Braided Packing to 500° F. (260° C.); (pH Range 0-14)
- **S2:** Gate Material - 316 Stainless Steel
- **M:** Seat Material - Metal
- **Coating or Paint:** 4G0 - 3 mils minimum (non-stainless steel parts) of Blue Enamel on Exterior and Standard (SP10) surface prep
- **MN-HD16-S1:** Actuator Type - Handwheel; 16 In Dia; 304 Stainless Steel Yoke

Unit Cost: \$2,909.00 Each

Lead Time: Will Advise

Thank you,

Shellie Pacheco Jones | Sales

ProTech Sales, USA Corp.

W (303) 471-0040 | M (303) 829-0873

WWW.PROTECHSALESUSA.COM | shellie@ptsusa.co

From: Kelby Sommer [mailto:kelby.sommer@deereault.com]
Sent: Wednesday, October 07, 2015 10:40 AM
To: Shellie Pacheco Jones <shellie@ptsusa.co>
Cc: Dax Julian <Dax@ptsusa.co>
Subject: RE: DeZurik Quote Request

Shellie,

We have gone back and forth a little more with our project and decided we would like to go back to the 12" Knife Gate valve. Could you please modify the quote package to reflect that change?

Regards,

Kelby Sommer, EIT

Deere & Ault Consultants, Inc.

420 West Main Street, Suite 202

Boise, Idaho 83702

Office: 208.331.9736

Cell: 208.249.9976

email: kelby.sommer@deereault.com

From: Shellie Pacheco Jones [<mailto:shellie@ptsusa.co>]
Sent: Thursday, September 17, 2015 5:09 PM
To: Kelby Sommer
Subject: RE: DeZurik Quote Request

Kelby,

DeZurik got back to me with a 2 Week ARO lead time to ship from Minnesota, for the below offered valve.

Please call or email me if I can be of further assistance.

Thank you,

Shellie Pacheco Jones | Sales

ProTech Sales, USA Corp.

W (303) 471-0040 | M (303) 829-0873

WWW.PROTECHSALESUSA.COM | shellie@ptsusa.co

From: Shellie Pacheco Jones
Sent: Wednesday, September 16, 2015 3:48 PM

To: 'Kelby Sommer' <kelby.sommer@deereault.com>
Subject: RE: DeZurik Quote Request

Kelby,

Sorry for the delay on this. DeZurik is recommending their metal seated KGC series for this application. The manual KGC will be good for -40°F; however, we would need to look at low temperature cylinder seals and solenoid coils if any accessories are required (other than handwheel operated).

Please find below preliminary quote and attached submittal information. I am verifying the selected model with DeZurik and will notify you of any changes, as well as lead time for 1 each.

KGC,8,ES,F1,S2,SMP,S2-M*MN-HD12-S1

- **KGC:** Style - Cast Knife Gate Valve
- **8:** Size - 8 Inch
- **ES:** Body Style - Extended Service Valve
- **F1:** End Connection - Flanged Drilling; ASME 125/150
- **S2:** Body Material - 316 Stainless Steel Cast
- **SMP:** Packing - PTFE Braided Packing to 500° F. (260° C.); (pH Range 0-14)
- **S2:** Gate Material - 316 Stainless Steel
- **M:** Seat Material - Metal
- **Coating or Paint:** 4G0 - 3 mils minimum (non-stainless steel parts) of Blue Enamel on Exterior and Standard (SP10) surface prep
- **MN-HD12-S1:** Actuator Type - Handwheel; 12 In Dia; 304 Stainless Steel Yoke

Unit Cost: \$1,432.00 Each

Lead Time: Will Advise (waiting for factory to advise)

Let me know if you have any questions or require any changes.

Thank you,

Shellie Pacheco Jones | Sales

ProTech Sales, USA Corp.

W (303) 471-0040 | M (303) 829-0873

WWW.PROTECHSALESUSA.COM | shellie@ptsusa.co

From: Kelby Sommer [mailto:kelby.sommer@deereault.com]

Sent: Monday, September 14, 2015 11:55 AM

To: Shellie Pacheco Jones <shellie@ptsusa.co>

Subject: RE: DeZurik Quote Request

Shellie,

The water going through this valve is ground water that is flowing through the mine and picking up the metals and various constituents deposited there. Minor leakage past the closed valve would not be an issue. The water will generally be 40 – 50° F but the valve will be located outdoors at an elevation of over 11,000 ft where it could easily see the low ambient temperatures previously discussed and could also become covered by several feet of snow.

The water chemistry data I provided is all that I have. There were no testing results for acid concentrations reported to us. As the data shows, there is also little to no alkalinity to buffer acids in solution, so with a pH of 2-3, the concentrations of strong acids will likely be very low.

This is not a tailings valve and a severe service model would be quite an over specification. However, this valve is going to be in a tough environment and not have easy access for service during large portions of the year, it will also not be actuated frequently. We would prefer not to turn the valve into a piece of scrap metal. There will be solids in the water but the velocities will be low and the valve will operate open to the atmosphere and partially full, so no high pressure abrasion.

The cast stainless valves with a low temp PTFE seat or a metal seat would likely be the most effective.

Please let me know if you have further questions.

Regards,

Kelby Sommer, EIT

Deere & Ault Consultants, Inc.

420 West Main Street, Suite 202

Boise, Idaho 83702

Office: 208.331.9736

Cell: 208.249.9976

email: kelby.sommer@deereault.com

From: Shellie Pacheco Jones [<mailto:shellie@ptsusa.co>]
Sent: Monday, September 14, 2015 9:54 AM
To: Kelby Sommer
Subject: RE: DeZurik Quote Request

Hello Kelby,

Please find below additional comments from DeZurik for this request:

-40 requirement is typically used for Alberta oil sands production customers, not a USA requirement typically. Media if mixed with water won't be flowing at -40 degrees. Does the valve need to shut off dead tight or will they accept leakage when it's isolated?

An example of 2-3 pH is mixture of sulfuric acid/vinegar/lemon juice, you need to provide me with concentration % to determine acidic strength and not pH level, as a rule we would be using, duplex's 2205, 904L and super duplex 2507 depending on concentration level and temp.

HPE pipe is another issue, typically you need to run a flat faced flange against with standard metal faced KGC valve, and plastic pipe; if not, the pipe face will crack due to irregular surface. We can provide flat face flanges, but it requires us to start with casting and not a standard machined body.

If this is a true tailings valve, the KSV was designed for this purpose, but the KSV has a high cost associated with what it provides, not for low cost requirement customers. Better to buy a low cost valve and throw it away and replace when it's been eating through by the acid.

Kelby, can you provide me with the % of concentration? Also, would your goal be for longer term solution or cost savings? This way I know which series best suits your preferred direction for quote.

Thank you,

Shellie Pacheco Jones | Sales

ProTech Sales, USA Corp.

W (303) 471-0040 | M (303) 829-0873

WWW.PROTECHSALESUSA.COM | shellie@ptsusa.co

From: Shellie Pacheco Jones
Sent: Friday, September 04, 2015 12:34 PM
To: 'Kelby Sommer' <kelby.sommer@deereault.com>
Subject: RE: DeZurik Quote Request

Hi Kelby,

DeZurik said -40 deg F is too low for the BRPA Urethane. You could consider a metal seated KGC instead of the KUL, if the service is just dirty water without too much solid content / abrasion issues. See attached technical brochure, and let me know if this option would be acceptable.

Thank you,

Shellie Pacheco Jones | Sales

ProTech Sales, USA Corp.

W (303) 471-0040 | M (303) 829-0873

WWW.PROTECHSALESUSA.COM | shellie@ptsusa.co

From: Kelby Sommer [mailto:kelby.sommer@deereault.com]
Sent: Friday, September 04, 2015 10:43 AM
To: Shellie Pacheco Jones <shellie@ptsusa.co>
Subject: RE: DeZurik Quote Request

Shellie,

I appreciate the information. I have looked at the different seat materials and while the BRPA could handle the water, it is also located where temperatures can go down to -40°F. The valve is

at an outlet and could also get the mine water on the body as it exits the pipe and cause corrosion of the valve body.

I have looked through the stainless steel body styles and think they might work better. Do you have application and product information on those in addition to what is on the DeZurik website?

Regards,

Kelby Sommer, EIT

Deere & Ault Consultants, Inc.

420 West Main Street, Suite 202

Boise, Idaho 83702

Office: 208.331.9736

Cell: 208.249.9976

email: kelby.sommer@deereault.com

From: Shellie Pacheco Jones [<mailto:shellie@ptsusa.co>]
Sent: Thursday, September 03, 2015 1:53 PM
To: Kelby Sommer
Cc: Dax Julian
Subject: DeZurik Quote Request

Hi Kelby,

DeZurik does not offer PTFE Lined Knife Gate Valves. For abrasive service, DeZurik can offer

their Urethane Lined Knife Gate Valves, using the BRPA Liner for chemical resistance. Please review the attached product bulletin, and let me know if this is something you would like quoted.

Thank you,

Shellie Pacheco Jones | Sales

ProTech Sales, USA Corp.

12340 Mead Way

Littleton, CO 80125

W (303) 471-0040 | M (303) 829-0873

WWW.PROTECHSALESUSA.COM | shellie@ptsusa.co